

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A bridge for connecting a computing device gaming console to a wireless network wherein the gaming console is incapable of displaying a web page that includes hypertext markup language code, the bridge comprising:

(a) a memory in which are stored authentication data and data, machine instructions, and a medium access control address, said authentication data being included to enable the bridge to be recognized as compatible for configuration through a the computing device gaming console, the authentication data comprising a key that is not publicly known;

(b) a port adapted to couple the bridge to the gaming console a computing device through a wire connector;

(c) a radio that includes a wireless receiver and a wireless transmitter that are coupled to an antenna system;

(d) a processor coupled to the memory, the port, and the radio, said processor executing the machine instructions to carryout a plurality of functions to connect the gaming console to a wireless network, wherein the gaming console is incapable of configuring the bridge through an interface that requires the display of a web page that includes hypertext markup language code, the functions including:

(i) receiving a discover request from the gaming console that is coupled to the bridge, wherein the discover request includes a one-time variable that is generated by the gaming console;

(ii) combining the one-time variable with the medium access control address to form a single concatenated component;

(iii) applying a one-way hashing algorithm to the single concatenated component producing a digest, the hashing algorithm using the key;

(iv) ~~responding to a discover the discover request from the gaming console computing device that is coupled to the bridge by returning an indication of an address of the bridge and configuration information for the bridge, as well as the authentication data, the digest and the medium access control address to the computing device~~ gaming console via the port to enable the gaming console to confirm a compatibility of the bridge for being configured with properties sent to the bridge by the gaming console;

(v[[ii]]) responding to a command received from the gaming console ~~computing device~~, to set properties of the bridge so as to enable the bridge to subsequently communicate data to and from the gaming console ~~computing device~~ over the wireless network; and

(vi[[iii]]) communicating data between the gaming console ~~computing device~~ and the wireless network.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The bridge of Claim 1, wherein the machine instructions further cause the processor to respond to a request received from the gaming console ~~computing device~~ to enumerate all available wireless networks by scanning for available wireless networks and returning a response to the gaming console ~~computing device~~ that identifies an address for each access point of an available wireless network, and other parameters for each available network enumerated by scanning.

5. (Currently Amended) The bridge of Claim 4, wherein the machine instructions further cause the processor to respond to the subsequent command received from the gaming console ~~computing device~~ by setting the properties of the bridge as needed to communicate with an available network identified by scanning.

6. (Currently Amended) A method for automatically configuring a bridge to communicate over a wireless network, where the bridge is coupled through a wire connection to a gaming console, wherein the gaming console is incapable of displaying a web page that includes hypertext markup language code, the method-computing device, comprising the steps of:

a gaming console sending a discover request over the wire connection to a bridge, wherein the discover request includes a one-time variable that is generated by the gaming console, the gaming console being incapable of configuring the bridge through an interface that requires the display of a web page that includes hypertext markup language code;

the bridge combining the one-time variable with a medium access control address to form a single concatenated component;

the bridge applying a one-way hashing algorithm to the single concatenated component producing a first digest, the hashing algorithm using a key that is not publicly known;

the bridge returning the digest and the medium access control address to the gaming console via the port to enable the gaming console to confirm a compatibility of the bridge for being configured with properties sent to the bridge by the gaming console;

the gaming console combining the one-time variable with the medium access control address received from the bridge and applying the one-way hashing algorithm using the key to produce a second digest;

comparing the second digest to the first digest received from the bridge such that upon determining that the first and second digest are equal, the gaming console verifies that the bridge is compatible with being configured using the properties sent by the gaming console;

upon confirming that the bridge is compatible, the gaming console sending a command to the bridge to set properties of the bridge so as to enable the bridge to subsequently communicate data to and from the gaming console over the wireless network; and

the bridge communicating data between the gaming console and the wireless network.

(a) ~~— sending a discover request over the wire connection to the bridge, requesting a response that provides information about the bridge;~~

(b) ~~— in response to the discover request, sending an indication of an address of~~

the bridge and configuration information for the bridge, as well as authentication data to the computing device;

(c) — based upon the indication of the authentication data, verifying whether the bridge is compatible for being configured with properties sent by the computing device, to communicate over the wireless network;

(d) — if the step of verifying confirms that the bridge is compatible, sending a command to the bridge from the computing device to set properties of the bridge so as to enable the bridge to subsequently communicate data to and from the computing device over the wireless network;

(e) — in response to the command, setting the properties of the bridge;
and

(f) — communicating data to and from the computing device through the bridge over the wireless network.

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) The method of Claim 6, further comprising the steps of:

[(a)] sending a request from the computing device/gaming console to the bridge to scan for available wireless networks;

[(b)] in response to the request to scan, scanning and enumerating all available wireless networks with the bridge; and

[(c)] returning a response from the bridge to the computing device/gaming console that identifies an address for each access point of each available wireless network enumerated in the step of scanning, and other parameters for each available network enumerated by the step of scanning.

10. (Currently Amended) The method of Claim 9, further comprising the step of selecting an available wireless network on the computing device/gaming console and specifying the properties sent to the bridge for the wireless network that is selected.

11. (Currently Amended) The method of Claim 6, further comprising the step of enabling a user to initiate configuration of the bridge by selecting an option in a program executed on the gaming console~~computing device~~.

12. (Cancelled)

13. (Currently Amended) The method of Claim 6, further comprising the step of enabling a user of the ~~computing device~~gaming console to selectively send a status request to the bridge, said status request indicating whether the bridge is connected in communication with a wireless network and if so, indicating a signal strength of wireless signals received by the bridge over the wireless network.

14. (Original) The method of Claim 6, further comprising the step of enabling a user to selectively query the bridge for the properties with which the bridge is currently configured.

15. (Currently Amended) The method of Claim 6, wherein after the bridge responds to the discover request, the bridge and the ~~computing device~~gaming console employ a unicast communication, based upon a media access control access address for the bridge and the ~~computing device~~gaming console.

16. (Currently Amended) The method of Claim 6, further comprising the step of enabling a user to change selected properties of the bridge in a user interface displayed by the ~~computing device~~gaming console.

17. (Currently Amended) One or more memory media~~A memory medium~~ that stores store machine instructions for carrying out the method~~steps (a), (c), and (d)~~ of Claim 6.

18. (Cancelled)

19. (Currently Amended) A gaming console~~computing device~~ for setting up a bridge to communicate over a wireless network, wherein the gaming console is incapable of displaying a web page that includes hypertext markup language code, the gaming console comprising:

(a) a memory in which machine instructions are stored;

(b) a network interface and port used for connecting through a wire lead to a bridge;

(c) a processor coupled to the memory and the network interface, said processor executing the machine instructions to carry out a plurality of functions to connect the gaming console to a wireless network, wherein the gaming console is incapable of configuring a bridge through an interface that requires the display of a web page that includes hypertext markup language code, the functions including:

(i) sending a discover request to a bridge the bridge that is connected to the network interface through the port, wherein the discover request includes a one-time variable that is generated by the gaming console;~~requesting information about the bridge;~~

(ii) receiving a response from the bridge consisting of a first digest and a medium access control address;

(iii) combining the one-time variable with the medium access control address received from the bridge to form a single concatenated component;

(iv) applying a one-way hashing algorithm to the single concatenated component producing a second digest, the hashing algorithm using a key that is not publicly known;

(v) comparing the second digest to the first digest received from the bridge such that upon determining that the first and second digest are equal, the gaming console verifies that the bridge is compatible with being configured using the properties sent by the gaming console;

(vi) upon confirming that the bridge is compatible, sending a command to the bridge to set properties of the bridge so as to enable the bridge to subsequently communicate data to and from the gaming console over the wireless network; and

(vii) communicating data over the wireless network through the bridge.

(ii) ~~using a key that is not publicly known for determining from the response to the discover request received from the bridge, whether the bridge has included an~~

~~indication that appropriate authentication data are stored on the bridge, thereby verifying whether the bridge is compatible with being set up to communicate over the wireless network by the computing device;~~

~~(iii) — if the bridge is compatible with being setup by the computing device, sending a command to the bridge with properties selected to configure the bridge for communicating over the wireless network; and~~

~~(iv) — communicating over the wireless network through the bridge.~~

20. (Cancelled)

21. (Currently Amended) The ~~computing device~~gaming console of Claim 20 Claim 19, wherein the machine instructions further cause the processor to send a request to the bridge to scan for available wireless networks.

22. (Currently Amended) The ~~computing device~~gaming console of Claim 21, wherein the machine instructions further cause the processor to select an available wireless network and specify the properties sent to the bridge for configuring the bridge to communicate over the wireless network that is selected.

23. (Currently Amended) The ~~computing device~~gaming console of Claim 19, wherein the machine instructions further cause the processor to enable a user to initiate configuration of the bridge by selecting an option in an operating system executed on the ~~computing device~~gaming console.

24. (Cancelled)

25. (Currently Amended) The ~~computing device~~gaming console of Claim 19, wherein the machine instructions further cause the processor to enable a user of the ~~computing device~~gaming console to selectively send a status request to the bridge, said status request indicating whether the bridge is connected in communication with a wireless network and if so, indicating a signal strength of wireless signals received by the bridge over the wireless network.

26. (Currently Amended) The ~~computing—device~~gaming console of Claim 19, wherein the machine instructions further cause the processor to enable a user to selectively query the bridge for the properties with which the bridge is currently configured.

27. (Currently Amended) The ~~computing—device~~gaming console of Claim 19, wherein the machine instructions further cause the processor to enable a user to change selected properties of the bridge in a user interface displayed by the ~~computing—device~~gaming console.